

L11 ANSWER 322 OF 322 REGISTRY COPYRIGHT 2003 ACS

RN 1147-65-5 REGISTRY

CN Benzoic acid, 2-[bis(carboxymethyl)amino]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Acetic acid, [o-carboxyphenyl]imino]di- (6CI, 7CI)

CN Anthranilic acid, N,N-bis(carboxymethyl)- (8CI)

OTHER NAMES:

CN ANDA

CN Anthranil-N,N-diacetic acid

CN Anthranildiacetic acid

CN Anthranilic-N,N-diacetic acid

CN N,N-Bis(carboxymethyl)anthranilic acid

CN N-(o-Carboxyphenyl)iminodiacetic acid

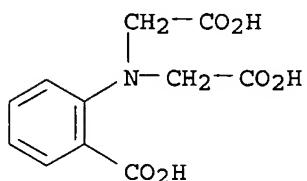
CN N-Carboxymethyl-N-(2-carboxyphenyl)glycine

MF C11 H11 N 06

CI COM

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, CSCHEM, GMELIN*, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

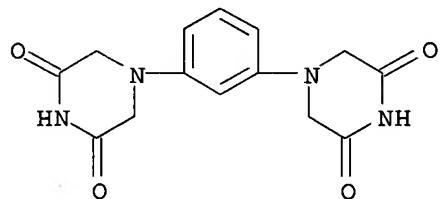
98 REFERENCES IN FILE CA (1957 TO DATE)

17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

98 REFERENCES IN FILE CAPLUS (1957 TO DATE)

20 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

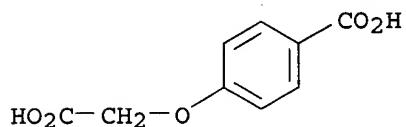
L5 ANSWER 870 OF 870 REGISTRY COPYRIGHT 2003 ACS
RN 1160-84-5 REGISTRY
CN 2,6-Piperazinedione, 4,4'-(1,3-phenylene)bis- (9CI) (CA INDEX
NAME)
OTHER CA INDEX NAMES:
CN 2,6-Piperazinedione, 4,4'-m-phenylenedi- (7CI, 8CI)
OTHER NAMES:
CN Acetic acid, (m-phenylenedinitrilo)tetra-, N,N:N',N'-diimide
CN Glycine, N,N'-(1,3-phenylene)bis[N-(carboxymethyl)-,
N,N:N',N'-diimide
FS 3D CONCORD
MF C14 H14 N4 O4
LC STN Files: CA, CAOLD, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

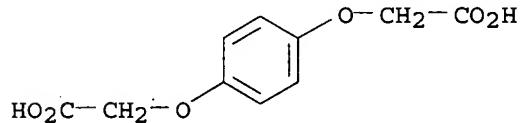
L1 ANSWER 12 OF 12 REGISTRY COPYRIGHT 2003 ACS
RN 19360-67-9 REGISTRY
CN Benzoic acid, 4-(carboxymethoxy)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN p-Anisic acid, .alpha.-carboxy- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 4-Carboxy-1-(carboxymethoxy)benzene
CN 4-Carboxyphenoxyacetic acid
FS 3D CONCORD
MF C9 H8 O5
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

36 REFERENCES IN FILE CA (1957 TO DATE)
37 REFERENCES IN FILE CAPLUS (1957 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

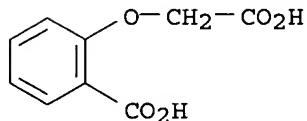
L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN 2245-53-6 REGISTRY
CN Acetic acid, 2,2'-(1,4-phenylenebis(oxy))bis- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acetic acid, (p-phenylenedioxy)di- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 1,4-Bis(carboxymethoxy)benzene
CN 1,4-Dicarboxymethoxybenzene
CN 1,4-Phenylenedioxydiacetic acid
CN Hydroquinone-O,O-diacetic acid
FS 3D CONCORD
MF C10 H10 O6
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
CSCHEM, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

61 REFERENCES IN FILE CA (1957 TO DATE)
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
62 REFERENCES IN FILE CAPLUS (1957 TO DATE)
7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

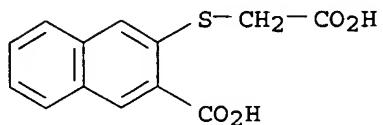
L8 ANSWER 189 OF 190 REGISTRY COPYRIGHT 2003 ACS
RN 635-53-0 REGISTRY
CN Benzoic acid, 2-(carboxymethoxy)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN o-Anisic acid, .alpha.-carboxy- (6CI, 7CI, 8CI)
OTHER NAMES:
CN (2-Carboxyphenoxy)acetic acid
CN (o-Carboxyphenoxy)acetic acid
CN Acetic acid, (2-carboxyphenoxy)-
CN o-(Carboxymethoxy)benzoic acid
FS 3D CONCORD
MF C9 H8 O5
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, RTECS*, SPECINFO, USPATFULL
(*File contains numerically searchable property data)
Other Sources: NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

47 REFERENCES IN FILE CA (1957 TO DATE)
47 REFERENCES IN FILE CAPLUS (1957 TO DATE)
13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

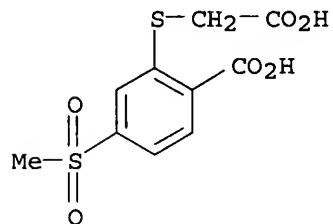
L11 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2003 ACS
RN 64289-70-9 REGISTRY
CN 2-Naphthalenecarboxylic acid, 3-[(carboxymethyl)thio]- (9CI)
(CA INDEX NAME)
FS 3D CONCORD
MF C13 H10 O4 S
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

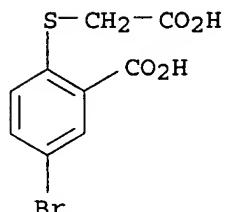
L13 ANSWER 16 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN 99059-45-7 REGISTRY
CN Benzoic acid, 2-(carboxymethylthio)-4-(methylsulfonyl)- (6CI)
(CA INDEX NAME)
FS 3D CONCORD
MF C10 H10 O6 S2
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

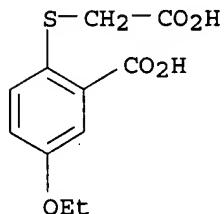
L13 ANSWER 15 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN 99067-28-4 REGISTRY
CN Benzoic acid, 5-bromo-2-(carboxymethylthio)- (6CI) (CA INDEX
NAME)
FS 3D CONCORD
MF C9 H7 Br O4 S
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

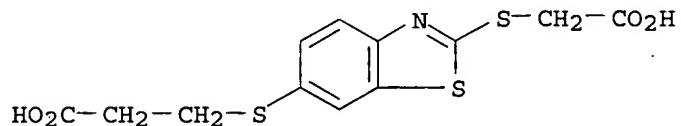
L13 ANSWER 13 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN 99866-05-4 REGISTRY
CN Benzoic acid, 2-(carboxymethylthio)-5-ethoxy- (6CI) (CA INDEX
NAME)
FS 3D CONCORD
MF C11 H12 O5 S
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

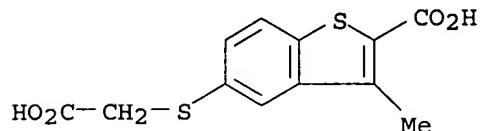
L13 ANSWER 12 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN 99988-76-8 REGISTRY
CN Propionic acid, 3-[2-(carboxymethylthio)-6-benzothiazolylthio]-
(6CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H11 N O4 S3
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

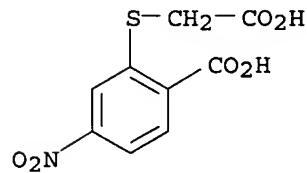
L13 ANSWER 10 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN 100953-29-5 REGISTRY
CN Benzo[b]thiophene-2-carboxylic acid, 5-(carboxymethylthio)-3-methyl-
(6CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H10 O4 S2
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

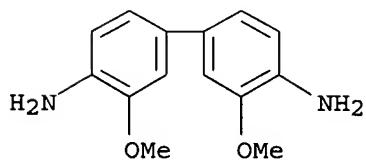
L13 ANSWER 9 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN 101714-12-9 REGISTRY
CN Benzoic acid, 2-(carboxymethylthio)-4-nitro- (6CI) (CA INDEX
NAME)
FS 3D CONCORD
MF C9 H7 N O6 S
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

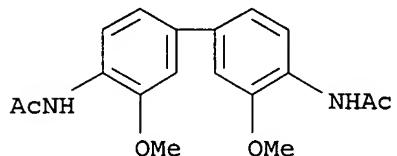
L22 ANSWER 40 OF 41 REGISTRY COPYRIGHT 2003 ACS
 RN 119-90-4 REGISTRY
 CN [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzidine, 3,3'-dimethoxy- (8CI)
 CN Fast Blue B Base (6CI)
 OTHER NAMES:
 CN 3,3'-Dimethoxy-4,4'-diaminodiphenyl
 CN 3,3'-Dimethoxybenzidine
 CN 3,3'-Dimethoxybenzidine
 CN 4,4'-Bi-o-anisidine
 CN 4,4'-Diamino-3,3'-dimethoxy-1,1'-biphenyl
 CN Amacel Developed Navy SD
 CN Azogene Fast Blue B
 CN Blue Base Irga B
 CN Blue Base NB
 CN Blue BN Base
 CN C.I. Disperse Black 6
 CN Cellitazol B
 CN Cibacete Diazo Navy Blue 2B
 CN Diacel Navy DC
 CN Dianisidine
 CN Fast Blue Base B
 CN Fast Blue DSC Base
 CN Hiltonil Fast Blue B Base
 CN Kayaku Blue B Base
 CN Lake Blue B Base
 CN Mitsui Blue B Base
 CN Naphthanal Blue B Base
 CN o-Dianisidine
 CN Setacyl Diazo Navy R
 FS 3D CONCORD
 DR 59777-10-5
 MF C14 H16 N2 O2
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DRUGU,
 EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*,
 MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT,
 USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1519 REFERENCES IN FILE CA (1957 TO DATE)
 35 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1519 REFERENCES IN FILE CAPLUS (1957 TO DATE)
 18 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

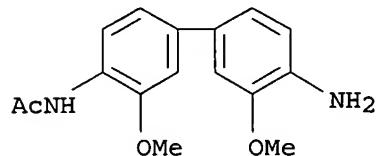
L22 ANSWER 17 OF 41 REGISTRY COPYRIGHT 2003 ACS
RN 83310-76-3 REGISTRY
CN Acetamide, N,N'-(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis- (9CI) (CA
INDEX NAME)
OTHER CA INDEX NAMES:
CN 4',4'''-Bi-o-acetanisidine (6CI)
OTHER NAMES:
CN N,N'-Diacetyl-o-dianisidine
FS 3D CONCORD
MF C18 H20 N2 O4
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, RTECS*, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

14 REFERENCES IN FILE CA (1957 TO DATE)
14 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

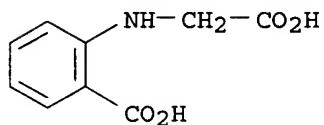
L22 ANSWER 16 OF 41 REGISTRY COPYRIGHT 2003 ACS
RN 83690-97-5 REGISTRY
CN Acetamide, N-(4'-amino-3,3'-dimethoxy[1,1'-biphenyl]-4-yl)- (9CI) (CA
INDEX NAME)
OTHER NAMES:
CN N-Acetyl-o-dianisidine
FS 3D CONCORD
MF C16 H18 N2 O3
LC STN Files: BEILSTEIN*, CA, CAPLUS, RTECS*, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1957 TO DATE)
10 REFERENCES IN FILE CAPLUS (1957 TO DATE)

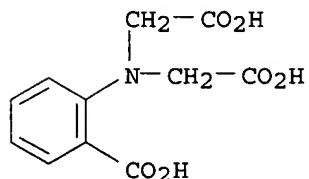
L25 ANSWER 28 OF 28 REGISTRY COPYRIGHT 2003 ACS
RN 612-42-0 REGISTRY
CN Benzoic acid, 2-[(carboxymethyl)amino]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Anthranilic acid, N-(carboxymethyl)- (6CI, 7CI, 8CI)
OTHER NAMES:
CN N-(2-Carboxyphenyl)glycine
CN N-(Carboxymethyl)anthranilic acid
FS 3D CONCORD
MF C9 H9 N O4
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
CSCHEM, GMELIN*, HODOC*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

44 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
44 REFERENCES IN FILE CAPLUS (1957 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

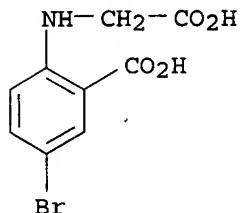
L25 ANSWER 27 OF 28 REGISTRY COPYRIGHT 2003 ACS
RN 1147-65-5 REGISTRY
CN Benzoic acid, 2-[bis(carboxymethyl)amino]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acetic acid, [(o-carboxyphenyl)imino]di- (6CI, 7CI)
CN Anthranilic acid, N,N-bis(carboxymethyl)- (8CI)
OTHER NAMES:
CN ANDA
CN Anthranil-N,N-diacetic acid
CN Anthranildiacetic acid
CN Anthranilic-N,N-diacetic acid
CN N,N-Bis(carboxymethyl)anthranilic acid
CN N-(o-Carboxyphenyl)iminodiacetic acid
CN N-Carboxymethyl-N-(2-carboxyphenyl)glycine
MF C11 H11 N O6
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, CSCHEM, GMELIN*,
TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

98 REFERENCES IN FILE CA (1957 TO DATE)
17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
98 REFERENCES IN FILE CAPLUS (1957 TO DATE)
20 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L25 ANSWER 24 OF 28 REGISTRY COPYRIGHT 2003 ACS
RN 32253-75-1 REGISTRY
CN Benzoic acid, 5-bromo-2-[(carboxymethyl)amino]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Anthranilic acid, 5-bromo-N-(carboxymethyl)- (8CI)
OTHER NAMES:
CN 5-Bromo-2-carboxyphenylglycine
CN 5-Bromo-N-(carboxymethyl)anthranilic acid
FS 3D CONCORD
MF C9 H8 Br N O4
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
MSDS-OHS
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1957 TO DATE)
6 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L48 ANSWER 71 OF 78 CA COPYRIGHT 2003 ACS
AN 110:145036 CA
TI Printing plate materials having photopolymerization initiator composition containing polymethine-type dyes and photopolymerizable composition
IN Fukui, Tetsuro; Arahara, Kozo; Fukumoto, Hiroshi; Oguchi, Yoshihiro
PA Canon K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03C001-68
ICS C08F002-50
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63208036	A2	19880829	JP 1987-40413	19870225
PRAI	JP 1987-40413		19870225		
OS	MARPAT 110:145036				

AB Printing plate materials contain a photopolymer. initiator compn. contg. polymethine-type dyes of the formula $RR_1C+(CH:CR_2)_m(CH:CH)nCH:CR_3R_4$. $X-$ [I; R, R1-4 = H, (substituted) alkyl, cycloalkyl, alkenyl, (substituted) aralkyl, (substituted) aryl, (substituted) styryl, (substituted) heterocyclyl; X- = anion; m = 0, 1; n = 0, 1, 2] and a photopolymer. photosensitive component as the main constituents. The materials are capable of making printing plates by using a compact and simple plate making app. using IR or semiconductor laser beams. Thus, a polyimide film was coated with a compn. contg. trimethylolpropane triacrylate, poly(Me methacrylate), I (R, R1-R4 = Et₂NC₆H₄-p; X- = ClO₄-; m = 0; n = 1), and benzoyl peroxide and then coated with poly(vinyl alc.) to give a photosensitive plate showing high sensitivity toward a semiconductor laser beam (830 nm).
ST printing plate material photopolymer initiator; polymethine dye printing plate material
IT Lithographic plates
(photopolymer. initiators contg. polymethine dyes for)
IT 15625-89-5 73214-79-6
RL: USES (Uses)
(photopolymerizable photosensitive compn., lithog. plates contg.)
IT 34330-11-5 91307-97-0 91308-01-9 91320-04-6 119141-83-2
119760-01-9 119760-03-1 119781-64-5 119781-66-7
RL: USES (Uses)
(photosensitizer, photosensitive lithog. plates contg.)
IT 94-36-0, Benzoyl peroxide, uses and miscellaneous 3006-86-8,
1,1-Bis(tert-butylperoxy)cyclohexane 11118-65-3, Methylcyclohexanone peroxide 12262-58-7, Cyclohexanone peroxide 33943-20-3,
Di-tert-butylperoxy isophthalate
RL: USES (Uses)
(polymer. initiator, photosensitive lithog. plates contg.)

L48 ANSWER 67 OF 78 CA COPYRIGHT 2003 ACS

AN 121:69570 CA

TI Photopolymerizable composition for printing platemaking

IN Komamura, Tawara; Watanabe, Hiroshi; Maehashi, Tatsuichi; Nakatani, Koichi; Kato, Katsunori

PA Konishiroku Photo Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-029

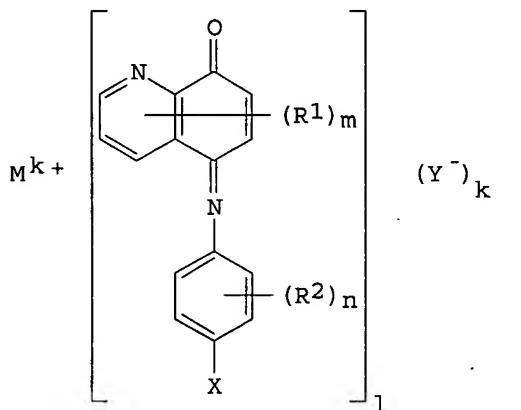
ICS G03F007-00; G03F007-027; G03F007-028

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05216227	A2	19930827	JP 1992-21321	19920206
PRAI	JP 1992-21321		19920206		

GI



AB The photopolymerizable compn. contains as photopolymn. initiator, (I) [$R1, R2 = H$, halo, monovalent substituent; $X = OH, NR3R4$ ($R3, R4 = H$, alkyl); $R2$ and $R3$ or $R4$ may form a ring; $Y^- = anion$; $M =$ transition element; $k = 1-3$; $l = 2,3$; $m = 1-5$; $n = 1-4$]. The photopolymerizable compn. is esp. useful in presensitized lithog. printing plates sensitive to visible and IR radiation.

ST lithog platemaking photopolymerizable compn; metal complex initiator photopolymerizable compn

IT Polymerization catalysts (photo-, metal complex)

IT Lithographic plates (presensitized, photosensitive compn. for, IR -sensitive)

IT 120307-06-4 153146-33-9 156060-41-2

RL: USES (Uses) (metal complex salt contg., photopolymn. initiators from)

IT 7440-18-8D, Ruthenium, complexes with oxoquinoline derivs. 7440-48-4D, Cobalt, complexes with oxoquinoline derivs. 153121-11-0D, cobalt complexes 156074-15-6D, complexes with cobalt and ruthenium 156074-16-7D, ruthenium complexes 156074-17-8D, ruthenium complexes 156074-18-9D, ruthenium complexes 156188-89-5 156188-91-9

RL: USES (Uses) (photopolymn. initiator)

L48 ANSWER 66 OF 78 CA COPYRIGHT 2003 ACS

AN 121:289655 CA

TI Photopolymerizable composition containing squaraines

IN Yamaoka, Tsuguo; Koseki, Kenichi; Obara, Mitsuharu; Shimizu, Ikuo; Ito, Yukiyoshi; Kawato, Hitoshi

PA Kyowa Hakko Kogyo Co., Ltd., Japan

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM G03F007-031

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
--	------------	------	------	-----------------	------

PI	WO 9401806	A1	19940120	WO 1993-JP932	19930707
----	------------	----	----------	---------------	----------

W: CA, JP, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

EP 611997 A1 19940824 EP 1993-914964 19930707

EP 611997 B1 20030212

R: CH, DE, FR, GB, LI

EP 1113335 A1 20010704 EP 2001-106388 19930707

R: CH, DE, FR, GB, LI

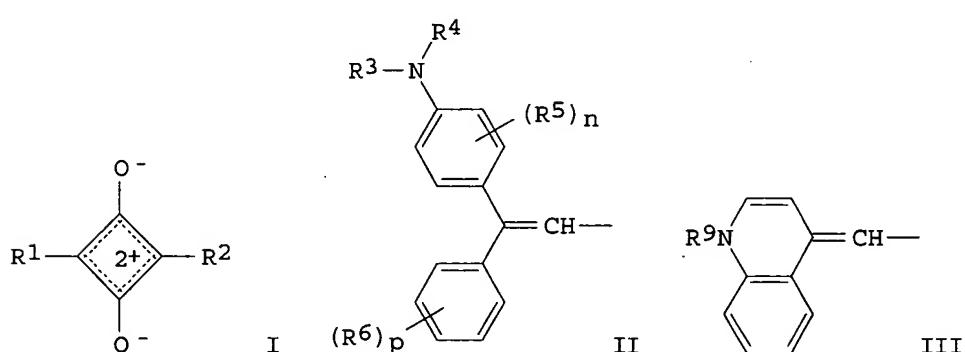
JP 3202989 B2 20010827 JP 1994-503173 19930707

PRAI JP 1992-185224 A 19920713

EP 1993-914964 A3 19930707

WO 1993-JP932 W 19930707

GI



AB The title photopolymerizable compn. contains an addn.-polymerizable compd. having .gtoreq.1 ethylenically unsatd. double bond (s), a free-radical generator, and a squarylium compd. I [R1, R2 = II (R3, 4 = H, alkyl, aryl, aralkyl; R5 = halo, alkyl, alkoxy, nitro, OH; n = 0-4; when n = 2-4, R5 may be the same or different; R6 = R5, CN, trifluoromethyl, NR7R8; R7, R8 = R3; p = 0-5, when p = 2-5, R6 may be the same or different), III (R9 = alkyl), etc.]. The compn. is highly sensitive to visible and near-IR rays, esp., a He-Ne laser, a light-emitting diode, a semiconductor laser, etc., each emitting light having a wavelength range >600 nm; the compn. is useful as the material of holograms, presensitized lithog. plates for laser direct platemaking, dry film resists, digital proof, photosensitive microcapsules, etc.

ST near IR photopolymerizable compn squaraine

IT Resists

(photo-, dry-film; photopolymerizable compn. highly sensitive to visible and near-IR rays for)

IT **Photoimaging** compositions and processes
(photopolymerizable, photopolymerizable compn.
highly sensitive to visible and near-IR rays)

IT **Lithographic** plates
(presensitized, photopolymerizable compn. highly sensitive to
visible and near-IR rays for)

IT 3524-68-3, Pentaerythritol triacrylate 6542-67-2, 2, 4,
6-Tris(trichloromethyl)-s-triazine
RL: TEM (Technical or engineered material use); USES (Uses)
(photopolymerizable compn. highly sensitive to visible and
near-IR rays)

IT 156057-15-7 156057-17-9 159094-53-8 159094-54-9 159094-55-0
159094-56-1
RL: TEM (Technical or engineered material use); USES (Uses)
(prepn. of squaraines for photopolymerizable compn. highly
sensitive to visible and near-IR rays)

IT 135596-19-9 159094-57-2
RL: TEM (Technical or engineered material use); USES (Uses)
(squaraines for photopolymerizable compn. highly sensitive to
visible and near-IR rays)

L48 ANSWER 61 OF 78 CA COPYRIGHT 2003 ACS
 AN 125:127860 CA
 TI Photosensitive material for lithographic plates and
 method for making the plates
 IN Maehashi, Tatsuichi; Matsumoto, Shinji; Kuroki, Takaaki; Kawakami, Sota
 PA Konishiroku Photo Ind, Japan
 SO Jpn. Kokai Tokkyo Koho, 20 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-028
 ICS G03F007-00; G03F007-027; G03F007-029; G03F007-20
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08114916	A2	19960507	JP 1994-247968	19941013
PRAI	JP 1994-247968	19941013		

AB The photosensitive material comprises a hydrophilic support
 having thereon a photosensitive layer contg. a compd. having
 .gtoreq.1 ethylenic unsatd. bond, a binder, and a photopolymer.
 initiator and a protective layer and the photopolymer. initiator
 at least contains a salt of a cationic dye with an organoboron compd.
 anion and the other B salts at mol. ratio 1:2-5. Also claimed is a method
 for making lithog. plates by imagewise exposure of a
 photosensitive layer to laser followed by removal of the unexposed
 area of the protective layer and the photosensitive layer by
 dissoln. The cationic dye may be a near-IR-absorbing
 $R_1R_2C+(CH:CR_5)m(CH:CH)_{n-1}CR_3R_4 X^-$ [R1-5 = H, (un)substituted H, alkyl,
 cycloalkyl, aryl, aralkyl, styryl, heterocyclyl; m = 0, 1; n = 0-2; X- = B
 compd. anion]. The photosensitive material shows good storage
 stability.
 ST presensitized lithog plate laser sensitive; photosensitive compn
 presensitized lithog plate; cationic dye presensitized lithog plate;
 polymethine dye presensitized lithog plate
 IT Dyes
 Dyes, cyanine
 (near-IR-absorbing, near-IR-sensitive
 photosensitive compn. for lithog. plates contg. cationic dye
 organoboron salts and B salts as photopolymer. initiators)
 IT Polymerization catalysts
 (photochem., near-IR-sensitive
 photosensitive compn. for lithog. plates contg. cationic dye
 organoboron salts and B salts as photopolymer. initiators)
 IT Lithographic plates
 (presensitized, near-IR-sensitive photosensitive
 compn. for lithog. plates contg. cationic dye organoboron salts and B
 salts as photopolymer. initiators)
 IT 65859-86-1, Lithium butyltriphenylborate 120307-06-4, Tetrabutylammonium
 butyltriphenylborate 141714-54-7 141714-63-8 153146-33-9,
 Tetrabutylphosphonium butyltriphenylborate 157075-01-9 179128-74-6
 179268-23-6
 RL: CAT (Catalyst use); USES (Uses)
 (near-IR-sensitive photosensitive compn. for
 lithog. plates contg. cationic dye organoboron salts and B salts as
 photopolymer. initiators)
 IT 26351-99-5 29570-58-9, Dipentaerythritol hexaacrylate
 RL: TEM (Technical or engineered material use); USES (Uses)
 (near-IR-sensitive photosensitive compn. for
 lithog. plates contg. cationic dye organoboron salts and B salts as
 photopolymer. initiators)

L48 ANSWER 60 OF 78 CA COPYRIGHT 2003 ACS

AN 125:261311 CA

TI Water-developable **photosensitive** composition and
lithographic printing plate

IN Hatsutori, Ryoji; Kojima, Yasuo; Sasa, Nobumasa

PA Konishiroku Photo Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-004

ICS G03F007-00; G03F007-029; G03F007-033; G03F007-32

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reproductive Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08190192	A2	19960723	JP 1995-2630	19950111
PRAI	JP 1995-2630		19950111		

AB The compn. contains a polymerizable compd., a **photopolymn.**
initiator, an org. solvent-dispersible latex, and a phenol OH-, NH2-,
and/or CO-contg. compd. Alternatively the compn. contains a polymerizable
compd., a near IR-absorbing cationic dye borate complex, and an
org. solvent-dispersible latex. The lithog. plate using the compn. is
also claimed. The compn. has improved storage stability.

ST **photosensitive** lithog plate water developable

IT **Lithographic** plates

(water-developable **photosensitive** compns. with storage
stability for lithog. printing plates)

IT 85-60-9, 4,4'-Butylidenebis(3-methyl-6-tert-butylphenol) 91-53-2
1843-05-6, 2-Hydroxy-4-octoxybenzophenone

RL: MOA (Modifier or additive use); USES (Uses)
(antioxidants; water-developable **photosensitive** compns. with
storage stability for lithog. printing plates)

IT 63226-13-1 141714-54-7 157186-53-3

RL: CAT (Catalyst use); USES (Uses)
(**photopolymn.** initiator; water-developable
photosensitive compns. with storage stability for lithog.
printing plates)

IT 3524-68-3, Pentaerythritol triacrylate 181815-80-5

RL: TEM (Technical or engineered material use); USES (Uses)
(water-developable **photosensitive** compns. with storage
stability for lithog. printing plates)

L48 ANSWER 59 OF 78 CA COPYRIGHT 2003 ACS
 AN 125:342868 CA
 TI **Photopolymerization** image-forming method using laser beam
 IN Urano, Toshoshi; Yamaoka, Tsugio; Nagasaka, Hideki
 PA Mitsubishi Chem Corp, Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-029
 ICS G03F007-028
 CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 37, 76
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08220759	A2	19960830	JP 1995-28413	19950216
PRAI	JP 1995-28413		19950216		
AB	The photopolymerizable compn., comprising (1) .gtoreq.1 radical-generator selected from org. peroxides, onium salts, hexaarylbimidazoles, titanocene compds., heterocycles contg. .gtoreq.1 of S, O, and N contg. polyhalomethyl group, and polyhalomethylsulfone compds., (2) a compd. having .gtoreq.2 ethylenic unsatd. bonds, and (3) a sensitizing dye, are simultaneously irradiated with a light for excitation from the ground state and a light for excitation from the triplet state of the sensitizer to form images. Clear images can be obtained by low power laser or IR laser irradn. The material is useful for manuf. of lithog. plates and elec. circuits.				
ST	image forming material sensitizing dye; radical generator presensitized lithog plate				
IT	Lithographic plates (presensitized, photopolymerizable compd. contg. radial generator , unsatd. compd. and sensitizing dye)				
IT	Resists (radiation-sensitive, photopolymerizable compd. contg. radial generator , unsatd. compd. and sensitizing dye)				
IT	1707-68-2	6542-67-2	58109-40-3	77473-08-6	125051-32-3
RL	CAT (Catalyst use); USES (Uses)				
	(photopolymerizable compd. contg. radial generator , unsatd. compd., and sensitizing dye)				
IT	15625-89-5, Trimethylolpropane triacrylate 26936-24-3, Methyl acrylate-methacrylic acid-methyl methacrylate copolymer RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)				
	(photopolymerizable compd. contg. radial generator , unsatd. compd., and sensitizing dye)				
IT	63226-13-1	83179-50-4	162461-65-6		
RL	MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)				
	(sensitizing dye; photopolymerizable compd. contg. radial generator , unsatd. compd., and sensitizing dye)				

L48 ANSWER 58 OF 78 CA COPYRIGHT 2003 ACS
AN 126:244890 CA
TI Photopolymerizing composition, image-forming material, radical generation, photosensitive material for preparing lithographic plate, and preparation of lithographic plate
IN Nakayama, Noritaka
PA Konishiroku Photo Ind, Japan
SO Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03F007-029
ICS B41C001-00; G03F007-00; G03F007-004; G03F007-027; G03F007-031; G03F007-20
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09034110	A2	19970207	JP 1995-180086	19950717
PRAI	JP 1995-180086		19950717		
OS	MARPAT 126:244890				

AB The title compn. contains a polymg. compd., .gtoreq.1 onium salt selected from R1P+R2R3R4 X-, R5S+R6R7 X-, R8I+R9 X-, and R10N+R11R12R13 X- (R1-4, R10-13 = alkyl, aryl, aralkyl, R1-4 or R10-13 may form a ring; R5-7 = alkyl, aryl, R5-7 may form a ring; R8, R9 = aryl; X- = counter anion), a light-heat-converting element, and a radical-generating agent. The image-forming material comprises the compn. contg. the onium salt in which the counter anion is Cl- or Br-. Radicals are generated by irradn. of the compn. using IR rays. The photosensitive material comprises a hydrophilic support with coatings of a photosensitive layer contg. a compd. having .gtoreq.1 ethylenic unsatd. bond, a binder, .gtoreq.1 of the above onium salts, a light-heat-converting element, and a radical-generating agent and a protective layer. The material is imagewise exposed under semiconductor laser scanning followed by removing the protective layer and the unexposed areas of the photosensitive layer to give a lithog. printing plate. The compn. provides high sensitive and high resoln. images using IR rays and shows good storage stability.

ST photopolymerizable compn onium salt; sulfonium salt
photopolymerizable compn; ammonium salt photopolymerizable
compn; light heat conversion agent; radical initiator
photopolymerizable compn; photosensitive lithog plate
onium salt; semiconductor laser scanning lithog plate; IR ray
radical generator

IT Phosphonium compounds
Quaternary ammonium compounds, uses
RL: MOA (Modifier or additive use); USES (Uses)
(photosensitive lithog. plate prep'd. from compn. contg. onium
compd. by semiconductor laser scanning)

IT Lithographic plates
(photosensitive; photosensitive lithog. plate
prep'd. from compn. contg. onium compd. by semiconductor laser scanning)

IT 12157-31-2 108961-97-3 109347-70-8 110930-60-4 173474-43-6
RL: MOA (Modifier or additive use); USES (Uses)
(light-heat conversion agent; photosensitive lithog. plate
prep'd. from compn. contg. onium compd. by semiconductor laser scanning)

IT 56-37-1, Benzyltriethylammonium chloride 869-51-2 1643-19-2,
Tetrabutylammonium bromide 3115-68-2, Tetrabutylphosphonium bromide
3462-97-3 4189-82-6, Diphenyl(p-methylphenyl)sulfonium bromide
5667-47-0 14866-34-3, Tetradodecylammonium bromide 25316-59-0,
Benzyltributylammonium bromide 58377-39-2, Bis(P-tert-
butylphenyl)iodonium bromide

RL: MOA (Modifier or additive use); USES (Uses)
(photosensitive lithog. plate prepd. from compn. contg. onium
compd. by semiconductor laser scanning)

IT 1707-68-2 29777-36-4 71002-23-8 188348-58-5

RL: CAT (Catalyst use); USES (Uses)
(radical initiator; photosensitive lithog. plate prepd. from
comprn. contg. onium compd. by semiconductor laser scanning)

L48 ANSWER 57 OF 78 CA COPYRIGHT 2003 ACS
 AN 126:270395 CA
 TI Process for producing lithographic printing plate,
 photosensitive plate and aqueous ink composition therefor
 IN Hase, Takakazu; Arimatsu, Seiji; Kimoto, Koichi
 PA Nippon Paint Co., Ltd., Japan
 SO U.S., 8 pp., Cont.-in-part of U.S.Ser.No.870,423, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM G03F007-30
 NCL 430302000
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5609993	A	19970311	US 1994-318559	19941005
	JP 04317065	A2	19921109	JP 1991-85176	19910417
PRAI	JP 1991-85176		19910417		
	US 1992-870423		19920417		

AB The present invention provides an improvement of a direct lithog. printing plate-making process using ink-jet printing to provide a lithog. printing plate having excellent resoln. Accordingly, the present invention provides an improvement of a process for producing a lithog. printing plate comprising selectively forming a light-transmittable oxygen barrier film on a photopolymerizable layer of a photosensitive plate, exposing to light and then removing uncured portion on which the oxygen barrier film is not covered, wherein a protective layer which is capable of transmitting oxygen gas and the light to cure the photopolymerizable layer is formed on the photopolymerizable layer, a photosensitive plate therefor, and an aq. ink compn. therefor.

ST lithog plate prepн ink jet printing
 IT Polyoxalkylenes, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (PEO 1; direct lithog. plate prepн. by photopolymn. and
 ink-jet printing using photosensitive plates with protective
 layers of)

IT Ink-jet printing
 (in prepн. of lithog. plates)
 IT Polyurethanes, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (oligomers, Viscoat; in prepн. of lithog. plates)

IT Lithographic plates
 (prepн. using photopolymn. and ink-jet printing)
 IT 9003-39-8, Poly(vinylpyrrolidone)
 RL: TEM (Technical or engineered material use); USES (Uses)
 (K 30; direct lithog. plate prepн. by photopolymn. and
 ink-jet printing using photosensitive plates with protective
 layers of)

IT 25322-68-3
 RL: TEM (Technical or engineered material use); USES (Uses)
 (PEO 1; direct lithog. plate prepн. by photopolymn. and
 ink-jet printing using photosensitive plates with protective
 layers of)

IT 128-37-0, 2,6-Di-tert-butyl-4-methylphenol, uses 3524-68-3 25930-98-7,
 Neocryl B 723 58206-31-8, Scriptset 540 71868-10-5, IR 907
 RL: TEM (Technical or engineered material use); USES (Uses)
 (direct lithog. plate prepн. by ink-jet printing and
 photopolymn. using photopolymn. compn. contg.)

IT 56-81-5, 1,2,3-Propanetriol, uses 569-64-2, Malachite green 9002-89-5,
 Poly(vinyl alcohol) 9016-45-9, Polyethylene glycol nonylphenyl ether
 RL: TEM (Technical or engineered material use); USES (Uses)

(direct lithog. plate prepn. by **photopolymn.** and ink-jet
printing using ink compn. contg.)

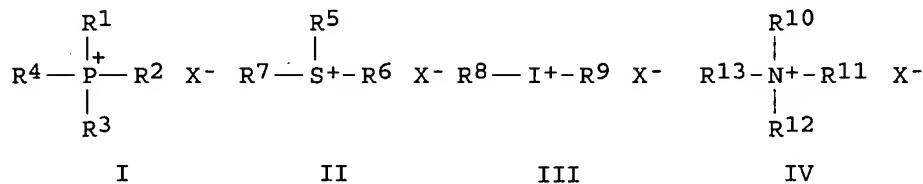
IT 9004-62-0, Hydroxyethylcellulose 9004-64-2, Hydroxypropylcellulose
9004-65-3, Hydroxypropylmethylcellulose

RL: TEM (Technical or engineered material use); USES (Uses)
(direct lithog. plate prepn. by **photopolymn.** and ink-jet
printing using **photosensitive** plates with protective layers
of)

L48 ANSWER 56 OF 78 CA COPYRIGHT 2003 ACS
 AN 127:101775 CA
 TI Photoradical generating agent, photopolymerizable
 composition, and process of presensitized lithographic printing
 plate
 IN Nakayama, Noritaka
 PA Konica Co., Japan
 SO Jpn. Kokai Tokkyo Koho, 24 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-029
 ICS C07F009-54; C08F002-50; G03F007-031; C07C381-12
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 35, 38
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09134009	A2	19970520	JP 1995-291286	19951109
PRAI JP 1995-291286		19951109		

 GI



AB In the photoradical generating agent contg. an onium salt
 represented by I, II, III, and IV (R1-4, R10-12 = alkyl, aryl, aralkyl;
 R5-7 = alkyl, aryl; R8,9 = aryl; X- = counter ion), a radical generating
 agent, and carbon black, the onium salt and/or the radical generating
 agent is adsorbed on carbon black. The counter ion may be a halogen ion.
 The radical generating agent may be a bisimidazole deriv. The compn. is
 used for a photosensitive layer of a presensitized lithog.
 printing plate, in which the photosensitive layer contains a
 compd. having ≥ 1 ethylenic unsatd. bond, a binder, and the
 photoradical generating agent. The presensitized lithog. printing
 plate is exposed by a laser beam, and then unexposed areas of the
 protective layer and the photosensitive layer are eluted. A
 high concn. of the photoradical was generated by irradiating
 IR light.

ST photoradical generator presensitized lithog printing plate
 IT Lithographic plates
 (photopolymerizable compn. in presensitized lithog. printing
 plate)

IT Carbon black, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (photopolymerizable compn. in presensitized lithog. printing
 plate)

IT 869-51-2, Tris(2-hydroxyethyl)sulfonium chloride 1643-19-2,
 Tetrabutylammonium bromide 3115-68-2, Tetrabutylphosphonium bromide
 3462-97-3, 4-Methoxybenzyltriphenylphosphonium chloride 4189-82-6
 5197-95-5, Benzyltriethylammonium bromide 5667-47-0 14937-42-9,
 Tetra(decyl)ammonium bromide 25316-59-0, Benzyltributylammonium bromide
 58377-39-2
 RL: MOA (Modifier or additive use); USES (Uses)
 (photopolymerizable compn. in presensitized lithog. printing

plate)
IT 2256-48-6 12157-31-2 108961-97-3 109347-70-8 110930-60-4
173474-43-6
RL: PEP (Physical, engineering or chemical process); TEM (Technical or
engineered material use); PROC (Process); USES (Uses)
(photopolymerizable compn. in presensitized lithog. printing
plate)
IT 90-94-8 1707-68-2 82799-44-8 189515-41-1
RL: MOA (Modifier or additive use); USES (Uses)
(photoradical generating agent in compn. in presensitized
lithog. printing plate)

L48 ANSWER 55 OF 78 CA COPYRIGHT 2003 ACS
 AN 128:134403 CA
 TI Photosensitive composition and element containing polyazide and infrared absorber in photocrosslinkable binder
 IN West, Paul Richard; Gurney, Jeffery Allen
 PA Eastman Kodak Co., USA
 SO U.S., 7 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM G03F007-012
 NCL 430167000
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5705309	A	19980106	US 1996-719100	19960924
	DE 19738134	A1	19980326	DE 1997-19738134	19970901
	JP 10115914	A2	19980506	JP 1997-258736	19970924
PRAI	US 1996-719100		19960924		

AB An IR imaging compn. comprises a photocrosslinkable polymeric binder having pendant photopolymerizable olefinic double bonds, a polyazide photoinitiator, and an IR -absorbing compd. The imaging compn. is useful in prepn. of a presensitized lithog. printing plate that can be used to provide an image using a laser, followed by development.
 ST IR laser photoimaging compn lithog plate; polyazide IR photoimaging compn lithog plate; photopolymerizable binder IR laser photoimaging compn
 IT Lithographic plates
 (IR imaging compns. contg. polyazides, IR absorbers, and photocrosslinkable binders for manuf. of)
 IT Polyamic acids
 RL: TEM (Technical or engineered material use); USES (Uses)
 (IR imaging compns. for lithog. plate manuf. contg. polyazides and)
 IT Carbon black, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (IR imaging compns. for lithog. plate manuf. contg. polyazides, photocrosslinkable binders and)
 IT Photoimaging materials
 (IR; contg. polyazides, IR absorbers, and photocrosslinkable binders for lithog. plate prepn.)
 IT Polyethers, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (di-Me siloxane-, BYK 307; IR imaging compns. for lithog. plate manuf. contg. polyazides and)
 IT Polysiloxanes, uses
 Polysiloxanes, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (di-Me, polyether-, BYK 307; IR imaging compns. for lithog. plate manuf. contg. polyazides and)
 IT 5284-79-7, 2,6-Bis(p-azidobenzal)-4-methylcyclohexanone
 RL: TEM (Technical or engineered material use); USES (Uses)
 (IR imaging compns. for lithog. plate manuf. contg. photopolymerizable binders and)
 IT 31942-21-9D, Benzophenonetetracarboxylic dianhydride-oxydianiline-m-phenylenediamine copolymer, esterified with hydroxyethyl methacrylate
 RL: TEM (Technical or engineered material use); USES (Uses)
 (IR imaging compns. for lithog. plate manuf. contg. polyazides and)
 IT 2718-90-3 2915-44-8 5284-80-0 10193-62-1, 4,4'-Diazidostilbene

14128-15-5 17303-16-1, 4,4'-Diazidobenzophenone 20237-98-3

48180-65-0 72695-23-9

RL: TEM (Technical or engineered material use); USES (Uses)
(IR imaging compns. for lithog. plate manuf. contg.
polymerizable binders, IR absorbers and)

IT 147-14-8, Irgalite Blue GLVO

RL: TEM (Technical or engineered material use); USES (Uses)
(Irgalite Blue GLVO; IR imaging compns. for lithog. plate
manuf. contg. polyazides and)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; EP 562952 1993
- (2) Anon; EP 654711 1995 CA
- (3) Bills; US 5278023 1994 CA
- (4) Etherington; US 5254431 1993 CA
- (5) Kotachi; US 5326670 1994 CA
- (6) Kozu; US 3840390 1974 CA
- (7) Pawlowski; US 4940646 1990 CA
- (8) Potts; US 5238777 1993 CA
- (9) Rauner; US 4139390 1979 CA
- (10) West; US 4622284 1986 CA

halogen atom, an alkyl group, or an alkoxy group; R14 = H, alkyl, aryl, or aralkyl; R15 = halogen, alkyl, aryl, alkoxy, or aralkyl; m = an integer of 0-4 provided that when m = 2-4, two adjacent R15 groups together may form an arom. ring which may be substituted with .gtoreq.1 halogen atom, an alkyl group, or an alkoxy group; R2 = III where R10, R11 = H, alkyl, aryl, or aralkyl). The compn. is highly sensitive to visible and near IR lights, particularly He-Ne laser, LED, diode laser, etc. having oscillation wavelengths in .gtoreq.600 nm, and thus is useful as a material for holograms, presensitized plates for laser direct process, dry film resists, digital proofs, and photosensitive microcapsules.

ST photopolymerizable compn squarylium compd lithog plate;
photoresist photopolymerizable compn squarylium compd;
holog photopolymerizable compn squarylium compd

IT Photoresists
(photopolymerizable compns. contg. addn.-polymerizable compds., radical-producing agents, and squarylium compds. as)

IT Holography
(photopolymerizable compns. contg. addn.-polymerizable compds., radical-producing agents, and squarylium compds. for)

IT Lithographic plates
(photopolymerizable compns. contg. addn.-polymerizable compds., radical-producing agents, and squarylium compds. for prepn. of)

IT Photoimaging materials
(photopolymerizable; contg. addn.-polymerizable compds., radical-producing agents, and squarylium compds.)

IT 135596-19-9 156057-17-9 159094-57-2
RL: TEM (Technical or engineered material use); USES (Uses)
(photopolymerizable compns. for holog. and photolithog. contg.)

IT 79-41-4D, Methacrylic acid, esters, polymers 3524-68-3, Pentaerythritol triacrylate 6542-67-2, 2,4,6-Tris(trichloromethyl)triazine
RL: TEM (Technical or engineered material use); USES (Uses)
(photopolymerizable compns. for holog. and photolithog. contg. squarylium compds. and)

IT 156057-15-7P 156057-31-7P 156099-24-0P 156764-74-8P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. and use in prep. photopolymerizable compns. for holog. and photolithog.)

IT 91-22-5, Quinoline, reactions 118-12-7, 1,3,3-Trimethyl-2-methyleneindoline 605-59-4, N-Ethyllepidinium iodide 2892-63-9 7478-69-5, 1,1-Bis(p-dimethylaminophenyl)ethylene 61699-62-5, 3,4-Diisopropoxy-3-cyclobutene-1,2-dione 155950-65-5, 1,3-Dihexyl-2-methylimidazo[4,5-b]iquinoxalinium tosylate 155950-67-7, 1,3-Dibutyl-2-methylimidazo[4,5-b]iquinoxalinium tosylate
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(reaction in prep. squarylium compds. for photopolymerizable compns. for holog. and photolithog.)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; EP 0379200 1990 CA
(2) Anon; JP 2306247 1990
(3) Anon; EP 0408014 1991 CA
(4) Santoh; US 5190849 1993
(5) Satoh; US 5256794 1993 CA
(6) Yamaoka; US 5527659 1996 CA

L48 ANSWER 49 OF 78 CA COPYRIGHT 2003 ACS

AN 131:94917 CA

TI Presensitized lithographic plate using surface-treated aluminum support and its manufacture

IN Mori, Takahiro

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 64 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

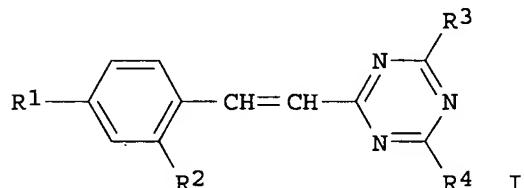
IC ICM G03F007-038

ICS B41N001-08; G03F007-00; G03F007-004; G03F007-016; G03F007-022; G03F007-023; G03F007-027; G03F007-09

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11167204	A2	19990622	JP 1997-332970	19971203
PRAI	JP 1997-332970				
OS	MARPAT	131:94917			
GI					



AB The title presensitized lithog. plate comprises an Al support having small pits with av. opening diam 0.2-3.0 μm which are formed densely in undulations with av. wavelength in height 3-30 μm or large pits with av. opening diam. 3-30 μm and roughly spherical protuberance having an av. diam. of 0.01 μm to $\geq 1/2$ of the small pit av. opening diam. inside of the small pits and thereover a layer made of a photosensitive compn. contg. an o-naphthoquinonediazidesulfonate of a polycondensation resin of poly(hydroxyphenols) with ketones or aldehydes (no. av. mol. wt. 3.00 .times. 102-2.00 .times. 103 and wt. av. mol. wt. 5.00 .times. 102-4.00 .times. 103) and an alkali-sol. resin. The photosensitive compn. may contain (1) a polymer having a structural unit CR1R2CR3(CONR4AmBOH) [R1, R2 = H, alkyl, CO2H; R3 = H, halo, alkyl; R4 = H, alkyl, Ph, aralkyl; A = divalent linking group; m = 0 or 1; B = (substituted) phenylene, (substituted) naphthylene] in its mol. structure and an o-quinonediazide compd., (2) a resin prep'd. by copolycondensation of phenol and a 1-9:9- 1 molar ratio mixt. of p- and m-cresols with aldehydes and an o-quinonediazide compd., (3) an o-quinonediazide compd., a sym.-triazine compd. I [R1, R2 = (substituted) alkyl, (substituted) alkoxy, H; R3, R4 = C1-3 haloalkyl or haloalkenyl], a dye of which the color changes by interaction with the photolysis product of the triazine compd., and an alkali-sol. resin, (4) a compd. having ≥ 1 addn.-polymerizable ethylenic unsatd. double bond., an acidic vinyl copolymer sol. or swellable in aq. alkali solns. comprising a compd. having an arom. and/or aliph. OH group in its side chain as a structural unit in its mol., a photopolyrn. initiator, and a diazo resin, (5) an acid-generator, an acid-decomposable compd., and an IR absorbent, and (6) an acid-generator, an acid-insolubilizing compd., and an IR absorbent. An Al support is either mech. coarsened or electrolytically coarsened after degreasing, surface dissoln.-treated with an alkali, neutralized with an acid,

electrolytically coarsened in an acidic electrolyte, addnl. surface dissoln.-treated with an alkali, neutralized with an acid, anodized to form an anodic oxide film, and coated thereon with a layer made of a metal oxide obtained by hydrolysis and polycondensation of an org. or inorg. metal compd. and then with a **photosensitive** layer made of the above compn. to give the title lithog. plate. An Al support may be surface dissoln.-treated with an alkali, neutralized with an acid, electrolytically coarsened in an acidic electrolyte based on HCl and/or AcOH, addnl. surface dissoln.-treated with an alkali, neutralized with an acid, anodized, and then coated with the above 2 layers to obtain the lithog. plate. The lithog. plate shows improved printing durability and small dot reproducibility upon printing under high speed and severe conditions such as offset rotary printing and good processability with ball-point pen and iso-PrOH-free dampening water.

ST presensitized lithog plate aluminum support surface; quinonediazide compd presensitized lithog plate; alkali soluble resin presensitized lithog plate; triazine presensitized lithog plate; vinyl copolymer presensitized lithog plate

IT Phenolic resins, uses
RL: DEV (Device component use); USES (Uses)
(presensitized lithog. plate using surface-treated aluminum support)

IT **Lithographic plates**
(presensitized; presensitized lithog. plate using surface-treated aluminum support)

IT Silicates, uses
RL: DEV (Device component use); USES (Uses)
(undercoat layer; presensitized lithog. plate using surface-treated aluminum support)

IT 3524-68-3 9003-35-4, Formaldehyde-phenol copolymer 9016-83-5, Cresol-formaldehyde copolymer 15625-89-5, Trimethylolpropane triacrylate 23295-00-3 35464-74-5, m-Cresol-p-cresol-formaldehyde-phenol copolymer 72063-23-1, Acrylonitrile-N-(4-hydroxyphenyl)methacrylamide-methacrylic acid-methyl methacrylate copolymer 74094-65-8, α -Naphthyl 1,2-naphthoquinone-2-diazido-5-sulfonate 220937-57-5
RL: DEV (Device component use); USES (Uses)
(presensitized lithog. plate using surface-treated aluminum support)

IT 2390-60-5, Victoria Pure Blue BOH 229326-43-6 229326-44-7
229326-45-8
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(presensitized lithog. plate using surface-treated aluminum support)

IT 7646-85-7DP, Zinc chloride, reaction products with diazo resin and ammonium hexafluorophosphate 16941-11-0DP, Ammonium hexafluorophosphate, reaction products with zinc chloride and diazo resin 125766-04-3DP, reaction products with zinc chloride and ammonium hexafluorophosphate 125785-09-3DP, Formaldehyde-p-diazodiphenylammonium sulfate-p-hydroxybenzoic acid copolymer, reaction products with zinc chloride and ammonium hexafluorophosphate
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(presensitized lithog. plate using surface-treated aluminum support)

IT 37321-70-3, AA 1050
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(presensitized lithog. plate using surface-treated aluminum support)

IT 11099-06-2D, Ethyl silicate, hydrolyzed
RL: DEV (Device component use); USES (Uses)
(undercoat layer; presensitized lithog. plate using surface-treated aluminum support)

L48 ANSWER 47 OF 78 CA COPYRIGHT 2003 ACS

AN 132:129957 CA

TI **Lithographic printing plate containing photopolymerizable monomer/prepolymer and photothermal conversion agent and its manufacture**

IN Kojima, Yasuo; Hiraoka, Saburo; Kuroki, Takaaki

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-00

ICS B41M001-06; B41N001-14; G03F007-004; G03F007-027; G03F007-028

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000035661	A2	20000202	JP 1998-204995	19980721
PRAI	JP 1998-204995		19980721		

AB The plate comprises a substrate having thereon a layer contg. a hydrophilic self-film-forming filler, a **photopolymerizable** lipophilic thermoplastic monomer/prepolymer, a polymn. initiator, and a **photothermal** conversion agent and a layer contg. a hydrophilic binder in succession. The plate is manufd. by overall exposing by active light after imagewise exposure by high-intensity light with absorption wavelength of the **photothermal** conversion agent to increase mol. wt. of the monomer/prepolymer. The plate shows improved printability, preventing stains in nonimage areas, pressure fog, finger prints, and blanket stains.

ST lithog printing plate lipophilic thermoplastic resin hydrophilic binder

IT Silica gel, uses

RL: DEV (Device component use); USES (Uses)
(Syloid 435; lithog. printing plate contg. **photopolymerizable** monomer/prepolymer and **photothermal** conversion agent)

IT **Lithographic plates**

(presensitized; lithog. printing plate contg.
photopolymerizable monomer/prepolymer and **photothermal** conversion agent)

IT 184973-22-6, CY 10

RL: DEV (Device component use); USES (Uses)
(IR absorber; lithog. printing plate contg.
photopolymerizable monomer/prepolymer and **photothermal** conversion agent)

IT 104922-10-3, GL 05

RL: DEV (Device component use); USES (Uses)
(hydrophilic binder; lithog. printing plate contg.
photopolymerizable monomer/prepolymer and **photothermal** conversion agent)

IT 188653-13-6, Snowtex S

RL: DEV (Device component use); USES (Uses)
(hydrophilic self-film-forming agent; lithog. printing plate contg.
photopolymerizable monomer/prepolymer and **photothermal** conversion agent)

IT 88004-52-8

RL: CAT (Catalyst use); USES (Uses)
(lithog. printing plate contg. **photopolymerizable** monomer/prepolymer and **photothermal** conversion agent)

IT 9003-20-7D, Polyvinyl acetate, hydrolyzed 25852-47-5, NK Ester 23G

RL: DEV (Device component use); USES (Uses)
(lithog. printing plate contg. **photopolymerizable** monomer/prepolymer and **photothermal** conversion agent)

L48 ANSWER 44 OF 78 CA COPYRIGHT 2003 ACS
AN 132:258177 CA
TI Photopolymerizable image-forming material for
lithographic plate
IN Urano, Toshiyoshi; Hino, Etsuko; Nagao, Takumi
PA Mitsubishi Chemical Industries Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-027

ICS G03F007-00; G03F007-029; G03F007-09

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000089455	A2	20000331	JP 1998-257893	19980911
PRAI	JP 1998-257893		19980911		

OS MARPAT 132:258177

AB The title image-forming material possesses, on a support having a surface where the gum-tape pressure-stuck thereon shows a peeling strength of .1toreq.500 g/cm, a layer made of a photopolymerizable compn. contg. (i) an ethylenic unsatd. compd., a cyanine dye cation in which heterocycles link via a polymethine chain, and an org. B anion or (ii) an ethylenic unsatd. compd., a salt of the cyanine dye cation and a counter anion other than org. B anion, and a halomethyl-contg. compd. The material shows high sensitivity toward near IR region and non-sensitive to UV region, good storage stability, and processability under white fluorescent light.

ST IR sensitive lithog plate cyanine dye; org boron compd
presensitized lithog plate; ethylenic compd presensitized lithog plate;
halomethyl compd photopolymerizable compn

IT Lithographic plates

(presensitized; presensitized lithog. plate contg. ethylenic compd.,
cyanine dye, and org. boron compd. or halomethyl compd.)

IT 949-42-8 3584-23-4, 2-(p-Methoxyphenyl)-4,6-bis(trichloromethyl)-s-
triazine 24305-03-1 32435-46-4, Bis(methacryloyloxyethyl) phosphate
42573-57-9, 2-(p-Methoxystyryl)-4,6-bis(trichloromethyl)-s-triazine
52628-03-2, Methacryloyloxyethyl phosphate 69432-40-2 77001-81-1
91105-84-9 117522-01-7, Tetramethylammonium butyltriphenylborate
119235-84-6 191726-37-1, Tetramethylammonium butyltris(2,6-
difluorophenyl)borate 193687-63-7 211796-67-7 211796-69-9
219537-49-2 220271-46-5 262380-41-6

RL: DEV (Device component use); USES (Uses)
(presensitized lithog. plate contg. ethylenic compd., cyanine dye, and
org. boron compd. or halomethyl compd.)

L48 ANSWER 42 OF 78 CA COPYRIGHT 2003 ACS
AN 132:258189 CA
TI Near-IR sensitive polymerizable composition for
lithographic plate
IN Urano, Toshiyoshi; Hino, Etsuko
PA Mitsubishi Chemical Industries Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 37 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03F007-027
ICS C08F002-50; G03F007-00; G03F007-004; G03F007-028; G03F007-031
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reproductive Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000098603	A2	20000407	JP 1998-272845	19980928
PRAI	JP 1998-272845		19980928		

AB The near-IR sensitive polymerizable compn. for lithog. plate has an ethylenic unsatd. compd., a cyanine dye cation with heterocyclic rings connected through a polymethine chain, an org. borate anion, and an aliph. amino acid, an aliph. amino acid ester, or a dipole ion of aliph. amino acid or the ester. The compn. provides the high sensitivity towards near-IR light, the excellent stability over time, and the insensitivity towards UV light.

ST near IR sensitive photopolymerizable compn lithog plate

IT Lithographic plates
(near-IR sensitive polymerizable compn. for lithog. plate)
IT 103-01-5, N-Phenylglycine 21911-84-2 24305-03-1 47252-39-1
62750-11-2 64401-02-1 77001-81-1 117522-01-7, Tetramethylammonium
n-butyltriphenylborate 191726-37-1 193687-62-6 193687-63-7
RL: TEM (Technical or engineered material use); USES (Uses)
(near-IR sensitive polymerizable compn.)

L48 ANSWER 34 OF 78 CA COPYRIGHT 2003 ACS
AN 134:200564 CA
TI Photopolymerizable composition containing specific dye for
light-sensitive lithographic original plate
IN Urano, Toshiyuki
PA Mitsubishi Chemical Corporation, Japan
SO PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM G03F007-028
ICS C08F002-48; G03F007-031; G03F007-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reproductive Processes)
Section cross-reference(s): 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001014931	A1	20010301	WO 2000-JP5588	20000821
	W: DE, US				
	JP 2002023361	A2	20020123	JP 2000-200400	20000703
	JP 2002023362	A2	20020123	JP 2000-207841	20000710
	JP 2002090989	A2	20020327	JP 2000-250764	20000822
	US 2002114966	A1	20020822	US 2002-79408	20020222
PRAI	JP 1999-235216	A	19990823		
	JP 2000-200400	A	20000703		
	JP 2000-207841	A	20000710		
	JP 2000-207842	A	20000710		
	WO 2000-JP5588	A1	20000821		

OS MARPAT 134:200564

AB The photopolymerizable compn. for a light-sensitive lithog. original plate comprises a layer of contg.: (A) An ethylenic compd. (B) a dye selected from the group consisting of the dyes, which each has a basic structure comprising heteroatoms bonded to each other through a polymethylene chain and has a specific substituent on the polymethylene chain or on another basic structure; and (C) A photopolymer initiator on a support. The photopolymerizable compn. contg. the dye is highly sensitive to light not only in the visible region but in long-wavelength regions including the near IR region and not sensitive to light in the UV region and shows the excellent handling characteristics under daylight fluorescent lamps.

ST photopolymerizable compn lithog original plate

IT Dyes

(dye in photopolymerizable compn. for
photopolymerizable lithog. original plate)

IT Light-sensitive materials

Lithographic plates

(photopolymerizable compn. for photopolymerizable
lithog. original plate)

IT 328063-81-6 328063-88-3 328063-95-2 328064-01-3 328064-07-9
328064-13-7 328064-16-0 328064-20-6

RL: TEM (Technical or engineered material use); USES (Uses)

(dye in photopolymerizable compn. for
photopolymerizable lithog. original plate)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Fuji Photo Film Co Ltd; JP 11119421 A 1999 CA

(2) Konica Corporation; JP 08114916 A 1996 CA

(3) Mitsubishi Chemical Corporation; JP 11119428 A 1999 CA

L48 ANSWER 33 OF 78 CA COPYRIGHT 2003 ACS
 AN 134:259221 CA
 TI Photopolymerizable composition and IR laser-sensitive material using it for lithographic plates
 IN Takasaki, Ryuichiro; Urano, Toshiyoshi
 PA Mitsubishi Chemical Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 15 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-029
 ICS C08F002-50; G03F007-004; G03F007-027
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001075276	A2	20010323	JP 1999-249482	19990903
PRAI	JP 1999-249482		19990903		
OS	MARPAT 134:259221				

AB The compn. contains (A) addn.-polymerizable ethylenically unsatd. compds., (B) IR-absorbing dyes, and (C) org. B complexes A1A2A2A4B-X+ (A1 = alkyl; A2-A4 = arom. group having electron-withdrawing group; X+ = counter cation) as photopolymer initiators. The IR laser-sensitive material comprises a support coated with the above compn. The compn. shows high sensitivity to IR laser beams to give lithog. printing plates with high resoln. (dot reprodn.) and no stains.
 ST IR laser sensitive lithog printing plate; borate complex photopolymer initiator lithog plate
 IT Lithographic plates
 (IR laser-sensitive material contg.
 photopolymerizable compn. for lithog. plates)
 IT Polymerization catalysts
 (photopolymer., borate complexes; IR laser-sensitive material contg. photopolymerizable compn. for lithog. plates)
 IT 25086-15-1P, Methacrylic acid-methyl methacrylate copolymer
 203742-63-6P, Acrylic acid-styrene copolymer ester with (3,4-epoxycyclohexyl)methyl acrylate
 RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (IR laser-sensitive material contg.
 photopolymerizable compn. for lithog. plates)
 IT 56361-55-8, A-BPE 4 95971-16-7, UA 306H
 RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
 (IR laser-sensitive material contg.
 photopolymerizable compn. for lithog. plates)
 IT 193687-63-7 220271-46-5
 RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
 (IR-absorbing dye; IR laser-sensitive material contg. photopolymerizable compn. for lithog. plates)
 IT 330804-59-6 330804-60-9
 RL: CAT (Catalyst use); USES (Uses)
 (photopolymer initiator; IR laser-sensitive material contg. photopolymerizable compn. for lithog. plates)

L48 ANSWER 31 OF 78 CA COPYRIGHT 2003 ACS

AN 135:68543 CA

TI Method for formation of negative images by imagewise irradiation of infrared laser

IN Aoshima, Keitaro

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-38

ICS G03F007-30

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001175006	A2	20010629	JP 1999-362335	19991221
PRAI	JP 1999-362335		19991221		

AB Neg. image-forming material consisting of a support having a photosensitive layer contg. (A) IR absorber, (B) radical generator, (C) radically polymerizable compd., and (D) binder polymer irradiated by imagewise exposure with IR laser, 1-20 s heat treatment at 60-120.degree., and aq. alk. development to give neg. images. The materials are suitable for digital direct printing plates.

ST digital direct printing plate photoimaging compn; IR absorber photopolymn compn imagewise irradn; neg image photopolymn compn IR laser

IT Optical materials

(IR absorbers; formation of neg. images suitable as digital direct printing plates by imagewise IR irradn.)

IT IR materials

(absorbers; formation of neg. images suitable as digital direct printing plates by imagewise IR irradn.)

IT IR laser radiation

Lithographic plates

(formation of neg. images suitable as digital direct printing plates by imagewise IR irradn.)

IT Photoimaging materials

(photopolymerizable; formation of neg. images suitable as digital direct printing plates by imagewise IR irradn.)

IT Onium compounds

RL: TEM (Technical or engineered material use); USES (Uses)

(radical generator; formation of neg. images suitable as digital direct printing plates by imagewise IR irradn.)

IT 134127-48-3

RL: TEM (Technical or engineered material use); USES (Uses)

(IR absorbing agent; formation of neg. images suitable as digital direct printing plates by imagewise IR irradn.)

IT 29570-58-9, Dipentaerythritol hexaacrylate 90216-38-9, Allyl methacrylate-methacrylic acid copolymer

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(formation of neg. images suitable as digital direct printing plates by imagewise IR irradn.)

IT 335612-65-2, Victoria pure blue naphthalenesulfonate

RL: TEM (Technical or engineered material use); USES (Uses)

(formation of neg. images suitable as digital direct printing plates by imagewise IR irradn.)

IT 262612-33-9

RL: TEM (Technical or engineered material use); USES (Uses)

(radical generator; formation of neg. images suitable as digital direct printing plates by imagewise IR irradn.)

THIS PAGE BLANK (up to)

L48 ANSWER 30 OF 78 CA COPYRIGHT 2003 ACS
AN 135:350408 CA
TI Laser diode (LD) imaging and **photopolymers** for LD imaging
AU Urano, Toshiyuki
CS Research Center, Mitsubishi Chemical Corp., Aoba-ku, Yokohama, 227, Japan
SO Proceedings of SPIE-The International Society for Optical Engineering
(2001), 4274(Laser Applications in Microelectronic and Optoelectronic
Manufacturing VI), 18-28
CODEN: PSISDG; ISSN: 0277-786X
PB SPIE-The International Society for Optical Engineering
DT Journal
LA English
CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reproductive Processes)
Section cross-reference(s): 73, 76
AB The laser **photopolymers** and the laser imaging systems equipped
with various laser diodes such as 410 nm-Violet laser, 532
nm-frequency-doubled laser and high-power- IR laser are
presented. The **photopolymer**'s performances in sensitivity,
resoln. and safelight character dependent on the wavelength and power of
laser light are discussed.
ST laser diode imaging **photopolymer**
IT IR lasers
Imaging
 Lithography
 (laser diode imaging and **photopolymers** for laser diode
 imaging)
IT Polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
 (photo; laser diode imaging and **photopolymers** for
 laser diode imaging)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Nagasaka, H; Mitsubishi Kasei R and D 1992, V1, P52
(2) Urano, T; Japan Printer 2000, V11, P19

L48 ANSWER 24 OF 78 CA COPYRIGHT 2003 ACS
 AN 136:332792 CA
 TI IR laser heat mode type negative working lithographic
 printing plate master
 IN Shimada, Kazuto; Nakamura, Ippei; Sorori, Tadahiro
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 25 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G03F007-029
 ICS B41N001-14; G03F007-00; G03F007-004; G03F007-027
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002116539	A2	20020419	JP 2000-310808	20001011
PRAI	JP 2000-310808		20001011		
OS	MARPAT 136:332792				
AB	The title heat mode type neg. working lithog. printing plate master contains (A) an onium type polymn. initiator, (B) a photothermal conversion compd., (C) a polymerizable compd., and (D) a borate compd. represented by Ar ₄ B-M ⁺ (M ⁺ = cation; Ar = arom.) in a photosensitive layer. The printing plate master shows excellent sensitivity and storage stability.				
ST	IR laser heat mode neg working lithog printing plate				
IT	Lithographic plates (IR laser heat mode type neg. working lithog. printing plate master)				
IT	Photoimaging materials (photopolymerizable; IR laser heat mode type neg. working lithog. printing plate master)				
IT	143-66-8	15522-59-5	15525-15-2	26985-34-2	108479-75-0
	144699-38-7	146761-08-2	153347-65-0	159123-85-0	412267-88-0
	412267-90-4	412267-92-6	412267-93-7	412267-95-9	412267-96-0
RL:	DEV (Device component use); MOA (Modifier or additive use); USES (Uses)				
	(borate compd. in photosensitive layer of IR laser heat mode type neg. working lithog. printing plate master to improve sensitivity as well as storage stability)				
IT	134127-48-3	173783-73-8	244606-76-6		
RL:	DEV (Device component use); USES (Uses)				
	(photothermal conversion compd. in photosensitive layer of IR laser heat mode type neg. working lithog. printing plate master to improve sensitivity as well as storage stability)				
IT	4986-89-4	Pentaerythritol tetraacrylate	139385-71-0	Glycerin dimethacrylate-hexamethylene diisocyanate copolymer	
RL:	DEV (Device component use); USES (Uses)				
	(polymerizable compd. in photosensitive layer of IR laser heat mode type neg. working lithog. printing plate master to improve sensitivity as well as storage stability)				
IT	19600-49-8	25183-63-5	57835-99-1	66003-76-7	66003-78-9
	398141-25-8	412043-42-6	412043-43-7		
RL:	CAT (Catalyst use); USES (Uses)				
	(polymn. initiator in photosensitive layer of IR laser heat mode type neg. working lithog. printing plate master to improve sensitivity as well as storage stability)				

L48 ANSWER 23 OF 78 CA COPYRIGHT 2003 ACS
 AN 136:361831 CA
 TI **Photosensitive lithographic printing plate**
 IN Oshima, Yasuhito
 PA Fuji Photo Film Co., Ltd., Japan
 SO Eur. Pat. Appl., 49 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 IC ICM G03F007-033
 ICS B41C001-10
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1204000	A1	20020508	EP 2001-125486	20011106
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2002139828	A2	20020517	JP 2000-337688	20001106
	CN 1353340	A	20020612	CN 2001-134562	20011106
PRAI	JP 2000-337688	A	20001106		
AB	A photosensitive lithog. printing plate is described which is useful for direct-laser write applications and provides durable prints under high productivity conditions. The plate contains a photosensitive layer contg. a poly(vinyl alc.) resin binder modified with an acetal skeleton comprising an aliph. cyclic structure. The photosensitive also contains: a photopolymn. initiator, a heat polymn. initiator, an addn. polymerizable compd., a sensitizer dye, a co-sensitizer dye, a color pigment, a fluorine-based surfactant, an IR absorber.				
ST	photosensitive lithog printing plate acetal modified polyvinyl alc binder; aliph cyclic structure modified polyvinyl alc binder printing plate				
IT	Lithographic plates (neg.-working presensitized; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)				
IT	Polyurethanes, uses RL: DEV (Device component use); USES (Uses) (photosensitive coating binder mixt.; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)				
IT	64-02-8 102-71-6, Triethanolamine, uses 141-43-5, Monoethanolamine, uses 298-14-6 1312-76-1, Potassium silicate 1321-69-3 5968-11-6, Sodium carbonate monohydrate 7757-83-7, Sodium sulfite 25417-20-3, Sodium dibutylnaphthalene sulfonate 25638-17-9 28348-64-3, Sodium isopropylnaphthalene sulfonate 126305-25-7 421557-82-6 RL: NUU (Other use, unclassified); USES (Uses) (developer compn.; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)				
IT	134127-48-3 RL: DEV (Device component use); USES (Uses) (photosensitive coating IR absorber; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)				
IT	4986-89-4, NK ester A-TMMT 29570-58-9, NK ester A-9530 139385-71-0, US 101H RL: DEV (Device component use); USES (Uses) (photosensitive coating addn. polymerizable compd.; lithog. printing plate for direct-write with photosensitive layer)				

contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)

IT 90216-38-9, Allyl methacrylate-methacrylic acid copolymer 141634-00-6, Methyl methacrylate-acrylonitrile-N-[(4-sulfamoyl)phenyl]methacrylamide copolymer 293329-29-0, MDI-HMDI-polypropylene glycol-2,2-bis(hydroxymethyl)propionic acid copolymer
RL: DEV (Device component use); USES (Uses)
(photosensitive coating binder mixt.; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)

IT 85-42-7D, 1,2-Cyclohexanedicarboxylic anhydride, reaction products with poly(vinyl alc.) and cyclohexanecarboxy aldehyde 2043-61-0D, Cyclohexanecarboxaldehyde, reaction product with poly(vinyl alc.) and cyclohexanedicarboxylic anhydride 9002-89-5D, Poly(vinyl alcohol), sapond., reaction product with cyclohexanecarboxy aldehyde and cyclohexanedicarboxylic anhydride
RL: DEV (Device component use); USES (Uses)
(photosensitive coating binder; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)

IT 583-39-1 120307-06-4 293329-35-8
RL: DEV (Device component use); USES (Uses)
(photosensitive coating co-initiator; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)

IT 120457-86-5
RL: DEV (Device component use); USES (Uses)
(photosensitive coating heat polymn. inhibitor; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)

IT 13891-29-7 220476-51-7 262612-33-9
RL: DEV (Device component use); USES (Uses)
(photosensitive coating heat polymn. initiator; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)

IT 125051-32-3 125407-19-4
RL: DEV (Device component use); USES (Uses)
(photosensitive coating photopolymn. initiator; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)

IT 118234-41-6 421548-66-5
RL: DEV (Device component use); USES (Uses)
(photosensitive coating sensitizer dye; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)

IT 85568-56-5, Megafac F-177 335612-65-2, Victoria pure blue naphthalenesulfonate
RL: DEV (Device component use); USES (Uses)
(photosensitive coating; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)

IT 9002-89-5, Poly(vinyl alcohol)
RL: DEV (Device component use); USES (Uses)
(protective film; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)

IT 6834-92-0
RL: NUU (Other use, unclassified); USES (Uses)
(substrate hydrophilic treatment; lithog. printing plate for
direct-write with **photosensitive** layer contg. poly(vinyl
alc.) binder modified with acetal skeleton having aliph. cyclic
structure)

IT 86468-54-4, Ethyl methacrylate-sodium 2-acrylamido-2-methyl-1-
propanesulfonate copolymer 141087-50-5, 3-Methacryloxypropyl
trimethoxysilane-Tetraethoxysilane copolymer 142938-52-1
RL: DEV (Device component use); USES (Uses)
(substrate interlayer sol compn.; lithog. printing plate for
direct-write with **photosensitive** layer contg. poly(vinyl
alc.) binder modified with acetal skeleton having aliph. cyclic
structure)

IT 67-56-1, Methanol, uses 107-21-1, Ethylene glycol, uses
RL: NUU (Other use, unclassified); USES (Uses)
(substrate interlayer sol compn.; lithog. printing plate for
direct-write with **photosensitive** layer contg. poly(vinyl
alc.) binder modified with acetal skeleton having aliph. cyclic
structure)

IT 7429-90-5, Aluminum, uses
RL: DEV (Device component use); USES (Uses)
(substrate; lithog. printing plate for direct-write with
photosensitive layer contg. poly(vinyl alc.) binder modified
with acetal skeleton having aliph. cyclic structure)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) American Hoechst Corporation; EP 0211406 A 1987 CA
(2) Hitachi Ltd; JP 06122713 A 1994 CA
(3) Mitsubishi Chem Ind Ltd; JP 58134629 A 1983 CA
(4) Sekisui Kagaku Kogyo Kabushiki Kaisha; EP 0150293 A 1985 CA

L48 ANSWER 22 OF 78 CA COPYRIGHT 2003 ACS

AN 136:377522 CA

TI Negative-working IR-sensitive photopolymerizable image-forming material, image formation, and presensitized photopolymerizable lithographic plate

IN Okamoto, Hideaki

PA Mitsubishi Chemical Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-11

ICS B41N001-14; G03F007-00; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002139843	A2	20020517	JP 2000-336815	20001106
PRAI	JP 2000-336815		20001106		

AB In the image-forming material comprising (a) a support, (b) a photopolymerizable compn. layer contg. an ethylenic monomer, a sensitizing dye absorbing a light of 650-1300 nm, and a radical-generating agent, and (c) a protective layer; the protective layer contains 30-90 wt.% of polyvinyl alc. The image-forming material is image-wise exposed with the light and developed with an alkali developer to form the image. Also claimed is a photopolymerizable lithog. plate employing the material and Al as a support. The image-forming material shows high sensitivity to IR and can be used under the irradn. circumstance of a visible white safelight.

ST IR photoimaging material protective coating polyvinyl alc; photopolymerizable lithog plate protective coating polyvinyl alc

IT Photoimaging materials

(neg. working; neg.-working IR-sensitive photopolymerizable image-forming material for photopolymerizable lithog. plate)

IT Lithographic plates

(neg.-working IR-sensitive photopolymerizable image-forming material for photopolymerizable lithog. plate)

IT Polyethers, preparation

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(polyamide-polyester-, lithog. plate; neg.-working IR-sensitive photopolymerizable image-forming material for photopolymerizable lithog. plate)

IT Polyesters, preparation

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(polyamide-polyether-, lithog. plate; neg.-working IR-sensitive photopolymerizable image-forming material for photopolymerizable lithog. plate)

IT Polyamides, preparation

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(polyester-polyether-, lithog. plate; neg.-working IR-sensitive photopolymerizable image-forming material for photopolymerizable lithog. plate)

IT Coating materials

(vinyl alc.-contg.; neg.-working IR-sensitive photopolymerizable image-forming material for photopolymerizable lithog. plate)

IT 425380-41-2P

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(lithog. plate; neg.-working **IR-sensitive photopolymerizable** image-forming material for **photopolymerizable** lithog. plate)

IT 32435-46-4 64401-02-1 77001-81-1
RL: TEM (Technical or engineered material use); USES (Uses)
(neg.-working **IR-sensitive photopolymerizable** image-forming material for **photopolymerizable** lithog. plate)

IT 9002-89-5, GL 03 9003-39-8, Luviskol K 30 25213-24-5, Vinyl acetate-vinyl alcohol copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(protective layer component; neg.-working **IR-sensitive photopolymerizable** image-forming material for **photopolymerizable** lithog. plate)

IT 3584-23-4
RL: TEM (Technical or engineered material use); USES (Uses)
(radical-generating agent; neg.-working **IR-sensitive photopolymerizable** image-forming material for **photopolymerizable** lithog. plate)

IT 425380-40-1
RL: TEM (Technical or engineered material use); USES (Uses)
(sensitizing dye; neg.-working **IR-sensitive photopolymerizable** image-forming material for **photopolymerizable** lithog. plate)

his

(FILE 'HOME' ENTERED AT 16:12:39 ON 30 APR 2003)

FILE 'REGISTRY' ENTERED AT 16:12:51 ON 30 APR 2003

L1 12 S CARBOXYPHENOXYACETIC ACID
L2 1 S HYDROQUINONE O O DIACETIC ACID
L3 0 S CAROXY O ANISIC ACID
L4 0 S CARBOXY O ANISIC ACID
L5 190 S CARBOXY AND ANISIC ACID
L6 2719 S ANISIC ACID
L7 1 S ANISIC ACID/CN
L8 190 S CARBOXY AND ANISIC ACID
L9 4 S RESORCINOL AND DIACETIC ACID
L10 28918 S NAPHTHALENECARBOXYLIC ACID
L11 6 S CARBOXYMETHYL AND THIO AND NAPHTHALENECARBOXYLIC ACID
L12 0 S CARBOXYMETHYLTHIO ADJ BENZOIC ACID
L13 18 S CARBOXYMETHYLTHIO AND BENZO?

FILE 'CA' ENTERED AT 16:23:05 ON 30 APR 2003

S 101714-12-9/REG#

FILE 'REGISTRY' ENTERED AT 16:23:09 ON 30 APR 2003

L14 1 S 101714-12-9/RN

FILE 'CA' ENTERED AT 16:23:09 ON 30 APR 2003

L15 2 S L14
L16 62628 S PHOTO? AND (IR OR INFRARED OR INFRA RED)
L17 34 S L16 AND CARBOXYMETHYL

FILE 'REGISTRY' ENTERED AT 16:26:23 ON 30 APR 2003

L18 0 S DIANISIDINE AND N AND TETRAACETIC ACID
L19 0 S DIANISIDINE AND TETRAACETIC ACID
L20 0 S DIANISIDINE AND ACETIC ACID
L21 10 S DIANISIDINE AND ACID
L22 41 S DIANISIDINE
L23 7351 S N CARBOXYMETHYL AND GLYCINE
L24 2193 S L23 AND PHENYL
L25 28 S N CARBOXYMETHYL AND PHENYL GLYCINE
L26 1 S 1147-65-5

FILE 'CA' ENTERED AT 16:44:05 ON 30 APR 2003

L27 98 S L26
L28 25 S L27 AND PHOTO?
L29 1 S L28 AND (IR OR INFRARED OR INFRA RED)
L30 24 S L28 NOT L29
L31 565336 S IR OR INFRARED OR INFRA RED
L32 954 S CARBOXYMETHYL AND L31
L33 34 S L32 AND PHOTO?
L34 0 S L33 AND LITHOGRAPH?
L35 34 S L33 NOT L30
E MUNNELLY H/IN
L36 1 S E4
E MUNNELLY H/AU
L37 8 S E4-E6
E WEST P/AU, IN
L38 55 S E3-4
E WEST PAUL/AU, IN
L39 15 S E3-4
L40 70 S L39 OR L38
L41 5 S L40 AND (IR OR INFRARED OR INFRA RED)
L42 1364 S LITHOGRAPH? AND (IR OR INFRARED OR INFRA RED)
L43 827 S L42 AND PHOTO?
L44 67 S L43 AND POLYMERIZ?

L45 0 S CARBOXY AND METHYL AND L44
L46 1 S L43 AND DAYLIGHT

=> s 143 and day light
443337 DAY
780319 LIGHT
339 DAY LIGHT
(DAY(W)LIGHT)
L47 0 L43 AND DAY LIGHT

=> s 143 and photopolym?
22404 PHOTOPOLYM?
L48 78 L43 AND PHOTOPOLYM?